

AEROTEC GUN IN

Creation date 16. November 2017
Revision date Version 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**
Substance / mixture AEROTEC GUN IN
Chemical name substance
naphthenic acids, zinc salts
CAS number 12001-85-3
EC (EINECS) number 234-409-2
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Substance's intended use Synthetic polymerized blend for maintenance and protection of internal parts of weapons and weapon systems
Substance uses advised against The product should not be used in ways other than those referred in Section 1.
Chemical safety report
- 1.3. Details of the supplier of the safety data sheet**
Manufacturer
Name or trade name AEROTEC GROUP a.s.
Address U Kříže 632/24, Praha 5 Jinonice, 158 00
Czech Republic
Identification number (CRN) 05121311
Phone +420 605 050 050
E-mail info@aerotec.cz
Competent person responsible for the safety data sheet
Name AEROTEC GROUP a.s.
E-mail info@aerotec.cz
- 1.4. Emergency telephone number**
National Health Service (NHS) 111
National poisoning information centre Scotland, NHS 24: 111

SECTION 2: Hazards identification**2.1. Substance or mixture classification**
Classification of the substance in accordance with Regulation (EC) No 1272/2008

The substance is classified as dangerous.

Eye Dam. 1, H318
Aquatic Chronic 3, H412

Full text of all classifications and hazard statements is given in the section 16.

Most serious adverse physico-chemical effects

Unknown.

Most serious adverse effects on human health and the environment

Causes serious eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements
Hazard pictogram**Signal word**

Danger

Dangerous substance

zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (EC: 224-235-5; CAS: 4259-15-8)
phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (EC: 272-028-3; CAS: 68649-42-3)

AEROTEC GUN IN

Creation date	16. November 2017	Version	1.0
Revision date			

Hazard statements

H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a doctor.
P501 Dispose of contents/container to be handing over to the person authorized to dispose of waste or by returning to the supplier.

2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients
3.1. Substances
Chemical characterization

Mixture of substances and additives specified below.

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
CAS: 12001-85-3 EC: 234-409-2	substance main component naphthenic acids, zinc salts	<5		
CAS: 90480-91-4 EC: 291-829-9	phenol, 2,2'-polythiobis[4-C8-30-alkyl derivs., calcium salts, overbased	1-<2,5	Aquatic Chronic 4, H413	
CAS: 4259-15-8 EC: 224-235-5	zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)	1-<2,5	Eye Dam. 1, H318 Aquatic Chronic 2, H411	
CAS: 68649-42-3 EC: 272-028-3	phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	0,5-<2	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411	

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures
4.1. Description of first aid measures

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

Inhalation

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

Skin contact

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

Eye contact

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

Ingestion

Do NOT induce vomiting. Provide medical treatment.

AEROTEC GUN IN

Creation date	16. November 2017	Version	1.0
Revision date			

4.2. Most important symptoms and effects, both acute and delayed**Inhalation**

not available

Skin contact

not available

Eye contact

Causes serious eye damage.

Ingestion

not available

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

not available

5.2. Special hazards arising from the substance or mixture

Fire produces heavy, black smoke, with potential development of carbon monoxide and dioxide and other toxic gases. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Provide sufficient ventilation. Follow the instructions in the Sections 7 and 8.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. Dispose of the collected material according to the instructions in the section 13. Upon an escape of large quantities of the product, inform the Fire Department and the Environmental Department of the Municipal Authority with the extended scope of competencies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.

6.4. Reference to other sections

See the Section 7, 8 and 13.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Prevent formation of gases and vapours in flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. No smoking. Protect against direct sunlight. Do not inhale gases and vapours. Prevent contact with skin and eyes. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

Storage temperature

<50 °C

7.3. Specific end use(s)

not available

AEROTEC GUN IN

Creation date	16. November 2017	Version	1.0
Revision date			

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

none

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Other protection: Protective antistatic clothing made of natural fibres (cotton) or synthetic fibres resistant to elevated temperatures. Contaminated skin should be washed thoroughly.

Respiratory protection

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

Thermal hazard

not available

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	thick, viscous liquid
Physical state	solid at 20°C
color	green
Odour	characteristic
Odour threshold	data not available
pH	data not available
Melting point/freezing point	-42 °C
Initial boiling point and boiling range	275 °C
Flash point	210 °C
Evaporation rate	data not available
Flammability (solid, gas)	data not available
Upper/lower flammability or explosive limits	
flammability limits	data not available
explosive limits	data not available
Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	<1%
solubility in fats	data not available
Partition coefficient: n-octanol/water	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
Viscosity	data not available
Kinematic viscosity	39.03 mm ² /s at 40°C
Explosive properties	data not available
Oxidising properties	data not available

9.2. Other information

Density	1.142 g/cm ³
ignition temperature	399 °C
combustion temperature	235 °C

AEROTEC GUN IN

Creation date 16. November 2017
Revision date Version 1.0

SECTION 10: Stability and reactivity**10.1. Reactivity**

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

The product is stable under normal conditions.

10.4. Conditions to avoid

not available

10.5. Incompatible materials

not available

10.6. Hazardous decomposition products

Not developed under normal uses.

At high temperatures and fire, hazardous products, such as carbon monoxide and carbon dioxide, chlorine compounds, hydrochloric acid, are formed.

SECTION 11: Toxicological information**11.1. Information on toxicological effects**

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

naphthenic acids, zinc salts

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD ₅₀	4920 mg/kg		Rat	

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Based on available data the classification criteria are not met.

AEROTEC GUN IN

Creation date 16. November 2017
Revision date Version 1.0

SECTION 12: Ecological information**12.1. Toxicity****Acute toxicity**

Harmful to aquatic life with long lasting effects.

phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

Parameter	Value	Time of exposure	Species	Environment	Determining method
LC ₅₀	1-5 mg/l	96 hour	Fishes (Pimephales promelas)		Static system
LC ₅₀	10-35 mg/l	96 hour	Fishes (Pimephales promelas)		Static system

12.2. Persistence and degradability

not available

12.3. Bioaccumulative potential

not available

12.4. Mobility in soil

not available

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

not available

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling. Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations.

Waste management legislation

Council Directive 75/442/EEC on waste, as amended. Decree No. 383/2001 Coll., on details regarding waste handling as amended. Decree No. 93/2016 Coll., (waste catalogue) as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

12 01 12 spent waxes and fats

Packaging waste type code

15 01 10 packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information**14.1. UN number**

Not subject to ADR.

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in the Sections 4 to 8.

AEROTEC GUN IN

Creation date	16. November 2017	Version	1.0
Revision date			

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
not available

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended (the Chemical Act). The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended. The Act No. 258/2000 Coll., on Protection of Public Health as amended. Decree No. 361/2007 Coll., determining conditions of occupational health protection as amended. Decree No. 415/2012 Coll., on the permissible level of pollution and its determination and implementation of certain other provisions of the Air Protection Act as amended. The Act No. 185/2001 Coll., on Waste and the Amendment of Some Other Acts as amended. The Act No. 201/2012 Coll., on the Protection of Atmosphere – Clean Air Act as amended. Decree No. 432/2003 Coll., laying down conditions for assigning categories to individual jobs, limit values of indices from biological exposure tests, conditions for the sampling of biological materials for biological exposure and the particulars of the reports on work with asbestos and biological agents as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information**A list of standard risk phrases used in the safety data sheet**

H315	Causes skin irritation.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Guidelines for safe handling used in the safety data sheet

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.
P501	Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association

AEROTEC GUN IN

Creation date	16. November 2017	Version	1.0
Revision date			

IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC ₅₀	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log K _{ow}	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Aquatic Chronic	Hazardous to the aquatic environment
Eye Dam.	Serious eye damage
Skin Irrit.	Skin irritation

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. The Act No. 350/2011 Coll., on Chemical Substances and Chemical Preparations as amended. First aid principles after the exposure to the chemicals (Zásady pro poskytování první pomoci při expozici chemickým látkám, doc. MUDr. Daniela Pelclová, CSc., MUDr. Alexandr Fuchs, CSc., MUDr. Miroslava Hornychová, CSc., MUDr. Zdeňka Trávníčková, CSc., Jiřina Fridrichovská, prom. chem.). Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

Version 4.0 replaces the BL version of 16.11.2017. Changes were made in Sections 2 and 16.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.



SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

AEROTEC GUN IN

Creation date

16. November 2017

Revision date

Version

1.0